ABSTRACT OF THE DISCLOSURE

An image signal processing method and an image signal processing apparatus for processing the color component signal obtained from a solid-state image pickup device including an arrangement of a plurality of photoelectric elements and a color filter arranged in the light receiving section of each pixel corresponding to the photoelectric element, an image signal generating apparatus and a computer program product for the image signal processing method. color component signal is fetched from a designated pixel corresponding to the photoelectric element having a filter that can transmit the green light on a line of the solid-state image pickup device. A color component signal is also fetched from a pixel corresponding to the photoelectric element having a filter for transmitting at least the green light on another line, which pixel is located in the neighborhood of the designated pixel. Further, based on a plurality of the color signals fetched in the foregoing steps, the value of the color component signal of the designated pixel having the filter for transmitting at least the green light is determined.